



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,948	03/15/2004	Daniel B. Nielson	2507-6358US (22043-US)	2920
60794	7590	06/19/2006		
TRASKBRITT, P.C. P.O. BOX 2550 SALT LAKE CITY, UT 84110			EXAMINER FELTON, AILEEN BAKER	
			ART UNIT 1755	PAPER NUMBER

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,948

Applicant(s)

NIELSON ET AL.

Examiner

Aileen B. Felton

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 2-10, 12-15, 17-24, 27-35 and 37-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 11, 16, 25, 26, 36, 50 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 2-10, 12-15, 17-24, 27-35, and 37-49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/18/2006.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 11, 16, 25, 26, 36, 50, and 51 are rejected on the ground of nonstatutory double patenting over claims 10-16 and 22-24 of U. S. Patent No. 6,692,634 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 11, 16, 25, 26, 36, 50, and 51 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the particular reactive material, does not reasonably provide enablement for any reactive material that comprises a metal and fluoropolymer. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification is enabled only for the specific reactive compositions. Applicant's claims however require only a metal and fluoropolymer and read on any composition that merely has these ingredients. Clearly it is not the case that any composition with a metal and

fluoropolymer would achieve the claimed overpressure, penetration level, pressure, damage, and flame. One of ordinary skill in the art would not be able to determine what compositions would meet these limitations without undue experimentation.

6. Claims 1, 11, 16, 25, 26, 36, 50, and 51 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The fuel, oxidizer, and amounts are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicant's claims require that a specific overpressure, penetration level, pressure, damage, and flame is achieved but only require a metal and fluoropolymer. Since these ingredients and amounts are essential to achieving the claimed overpressure, penetration level, pressure, damage, and flame they must be included in the claims. One of ordinary skill in the art would not be able to determine what compositions would meet this limitation without undue experimentation.

7. Claims 1, 11, 16, 25, 26, 36, 50, and 51 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the specific fuel, oxidizer and amounts. Since these ingredients and amounts are essential to achieving the claimed overpressure, penetration level, pressure, damage, and flame they must be included in the claims. One of ordinary skill in the art would not be able to determine what compositions would meet this limitation without undue experimentation.

Claim Rejections - 35 USC § 102

Art Unit: 1755

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Posson et al (6,896,791).

Posson et al discloses a propellant for use in munitions that comprises a terpolymer of hexafluoropropylene, vinylidene fluoride, and tetrafluoroethylene (col. 4, lines 5-15). The composition includes a primary fuel that can be any active fuel and includes metals (col. 4, lines 58-67). Energetic plasticizers such as BDNPF/BDNPA may be added (col. 6, lines 45-55) as well as lubricants such as graphite (col. 7, lines 35-52). The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of In re Ludke, 169 USPQ 563; In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594; In re Best et al, 195 USPQ 430; and In re Brown, 173 USPQ 685, 688.

10. Claims 1, 11, 16, 25, 26, 36, 50, and 51 rejected under 35 U.S.C. 102(b) as being anticipated by Hohmann et al (6,132,536).

Hohmann discloses a propellant for munitions that comprises zirconium with 3% hafnium content, Viton, and graphite (example 3). The claimed mass is also disclosed. The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

11. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by *Doris et al*(5,472,536).

Doris discloses a composition used in a munition that comprises magnesium, Viton, Teflon, and ethyl cellulose (col. 2, lines 55-67). The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

12. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by *Lee et al*(6,315,847).

Lee discloses a composition comprising magnesium, Teflon, and plasticizer such as BDNPA/F (col. 4, lines 18-30). The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169

USPQ 563; In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594; In re Best et al, 195 USPQ 430; and In re Brown, 173 USPQ 685, 688.

13. Claims 1, 11, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kolouch et al (6,042,702).

Kolouch discloses a composition comprising terpolymer of hexafluoropropylene, vinylidene fluoride, and tetrafluoroethylene with a filler such as hafnium (col. 9, lines 20-40). The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of In re Ludke, 169 USPQ 563; In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594; In re Best et al, 195 USPQ 430; and In re Brown, 173 USPQ 685, 688.

14. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Zavitsanos et al(6,679,176).

Zavitsanos discloses a reactive projectile comprising hafnium and a fluorinated polymer (col. 3). The claimed mass is also disclosed. The overpressure, penetration level, pressure, damage, and flame are inherent properties of this composition. As to limitations which are considered to be inherent in a reference, note the case law of In re Ludke, 169 USPQ 563; In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594; In re Best et al, 195 USPQ 430; and In re Brown, 173 USPQ 685, 688.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 16, 25, 26, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zavitsanos et al(6,679,176) as applied to claim 1 above, and further in view of Posson et al(6,896,751).

Zavitsanos does not disclose the claimed terpolymer.

Posson teaches the use of terpolymer of hexafluoropropylene, vinylidene fluoride, and tetrafluoroethylene with munitions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the fluorinated polymer taught by Posson since these polymers are used in munitions and since Zavitsanos generally suggests that fluorinated polymers can be used.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen B. Felton whose telephone number is 571.272.6875. The examiner can normally be reached on Monday-Friday 6:30-4:00, except alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571.272.1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AILEEN FELTON
PRIMARY EXAMINER